

**AMENDMENTS TO THE CLAIMS**

Claims 1-36 (Canceled).

Claim 37 (Currently amended): An isolated nucleic acid comprising a nucleic acid that specifically hybridizes with a nucleic acid encoding the polypeptide of SEQ ID NO:33 under stringent conditions comprising 0.2x SSC wash at 65°C and that encodes a polypeptide having bilin reductase activity.

Claim 38 (Currently amended): The nucleic acid of claim 37, wherein said nucleic acid is comprises a vector.

Claims 39-79 (Canceled).

Claim 80 (Currently amended): The nucleic acid of claim 38, wherein said vector is present in a a cell.~~The cell of claim 35, wherein said heterologous nucleic acid encodes an amino acid sequence of a polypeptide selected from the group consisting of HY2, athy2, slr0116, c362\_anab, yep2\_synpy, yep3\_synpy, PeyA\_ANASP, PeyA\_NOSPU, PeyA\_SYNY3, PeyA\_SYN81, PeyA\_PROME, PebA\_SYNPY, PebA\_SYN81, PebA\_PROMA, PebA\_PROME, PebA\_NOSPU, PebB\_SYNPY, PebB\_SYN81, PebB\_PROMA, PebB\_PROME, PebB\_NOSPU, HY2\_ARATH, RCCR\_ARATH, and RCCR\_HORVU,~~

Claims 81-82 (Canceled).